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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,810	02/18/2004	George Plester	01638.0014.NPUS01	6837

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EXAMINER

TRUONG, THANH K

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/779,810	Applicant(s) PLESTER, GEORGE	
	Examiner Thanh K. Truong	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 66 and 68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 66 and 68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment received on January 5, 2006.
2. Applicant's cancellation of claims 20-65, 67 and 69 is acknowledged.
3. In the office action date October 2, 2005, the examiner inadvertently omitted claim 9 in the 103 rejection, the examiner hereby includes claim 9 in the 103 rejection as was intended.

Drawings

4. The drawings were received on January 5, 2006. These drawings are acceptable.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4-10, 12-17, 19, 66 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drevfors (6,256,964) in view of Helmut (5,860,461).

Drevfors discloses a method comprising the steps of:

filling the inside of the package (1) with a sterilizing vapour (column 4, lines 42-44);

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holding the sterilizing vapour on the inside of the package for a sufficient amount of time to sterilize the inside of the package;

removing a portion of the sterilizing vapour (column 4, lines 47-54);

filling the package with a product (column 4, lines 56-58);

capping the filling aperture of the package containing the product (column 4, lines 61-63).

Drevfors discloses the claimed invention, but does not expressly disclose the membrane fitted over the filling aperture.

Helmut discloses the membrane fitted over the filling aperture the membrane being configured to be disposed in a first position in which the membrane is substantially impenetrable to vapour and a second position in which the membrane has been displaced to permit the insertion of an elongated member into the package (figures 5, 6 & 10 and column 2, lines 60-63). Helmut method provides "a container of a sealing cap and a process which aseptic filling of beverages is possible at an acceptable level of engineering complexity and cost" (column 2, lines 24-28).

Therefore, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified Drevfors method by incorporating the method of using the membrane as taught by Helmut to provide a method in which aseptic filling of beverages is possible at an acceptable level of engineering complexity and cost.

The combining of the references (Drevfors and Helmut) further discloses:

the step of allowing a sufficient quantity of the sterilizing vapour to exit the package before filling the package with a product to avoid affecting the quality of the product, wherein the sterilizing vapour exits the package and sterilizes a part of a filling device that comes into contact with the product (Helmut - column 4, lines 37-42);

the membrane opens to greater than about 10% of the area of the filling aperture during the filling steps (Helmut – figure 5);

displacing the sterilizing vapour with sterile air (sterile gas as in claim 6), wherein the sterile air forms a headspace of the capped package (column 8, lines 1-8);

pressing the membrane segments tightly against inner walls of the package to accelerate displacement of the sterilizing vapour by eliminating the gap between membrane segments and the inside of the package (Helmut – figure 5);

the step of conveying the package between the filling steps and the capping step in a non-sterile atmosphere, wherein the inside of the package remains substantially free of microbiological contamination (figure 1 of Drevfors clearly shows the processing plant 3 is a non-sterile atmosphere) (as in claim 9);

the step of wetting the membrane with a fluid, wherein the wetted membrane has increased ability to prevent entry of contaminants;

heating the package wherein the heating increases the internal pressure of the gas in the package, and enhances prevention of entry of contaminants into the package (Helmut – column 4, lines 17-19);

using conventional non-aseptic filling equipment adapted to fill aseptically; wherein the non-aseptic filling equipment is used aseptically part time;

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the step of sterilizing an outside surface of the membrane before the capping step; wherein the step of sterilizing an outside surface of the membrane is achieved with a sterilizing medium that does not affect the quality of the product in small amounts (Helmut – column 4, lines 22-24);

the step of sterilizing the parts of the filling device that come in contact with the product to be filled between filling operations by spraying with chlorinated water, by sterilizing vapour (Helmut – column 4, lines 37-42);

conveying the package from a location for filling the package with a sterilizing vapour to a filling location, the package having the sterilizing medium substantially sealed inside of the package while the package is being conveyed (Drevfors - figure 1); and disposing a cap over the membrane, whereby the membrane becomes interal to the cap after the cap is disposed over the membrane (Helmut – figure 10).

7. Claims 3, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drevfors (6,256,964) in view of Helmut (5,860,461).

As discussed above in paragraph 6 of this office action, the combination of the references discloses the claimed invention, but did not expressly disclose that: the membrane material is an elastomer selected from the group consisting of silicone rubber, natural rubber, etc, wherein the fluid contains a thickener to increase the viscosity of the fluid, and the step of rinsing the parts of the filling device that come in contact with the product to be filled with hot water after each filling step.

The examiner take Official Notice that it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have used membrane that is made out of natural rubber to provide the elastic property to the mechanical sealing device (furthermore, Helmut discloses the use of elastic material – column 5, lines 65), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

The examiner take Official Notice that it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made to have made the fluid contains a thickener to increase the viscosity of the fluid, since it is old and well known in the art to add thickener to increase the viscosity of the fluid (common sense). The examiner take Official Notice that it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made to rinse the parts of the filling device that come in contact with the product to be filled with hot water after each filling step to ensure the equipment is thoroughly sterilize in the process.

8. Regarding claims 3, 11 and 18 (the paragraph 7 of this office action), Applicant had not previously properly challenged the Official Notice taken by the examiner (in the Office Action date October 2, 2005 to reject claims 3, 11 and 18). In general, a challenge, to be proper, must contain adequate information or argument so that *on its face* it creates a reasonable doubt regarding the circumstances justifying the Official Notice. Since the Applicant fails to properly challenge the Official Notice during

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examination, the Applicant's right to challenge the Official Notice is waived, and the subject matters recited in claims 3, 11 and 18 are considered as Applicant's admitted prior art.

Response to Arguments

9. Applicant's arguments filed January 5, 2006 have been fully considered but they are not persuasive.

10. In response to the Applicant's argument that:

"Drevfors discloses that the vertically reciprocating pipe 9 (used to deposit the sterilization agent) may be fed into the package where it sprays a sterilization agent and may then be removed from the package. See col.4, ll.44-47. There is no discussion in Drevfors about holding any sterilizing vapour on the inside of the package (and the Examiner has not pointed to any specific portion of the Drevfors disclosure to support his position). Further, it is not possible for Drevfors to hold sterilizing vapour inside of the package because, as stated above, the package is not re-sealed between sterilization and filling. Thus, any vapours from the sterilization agent are capable of escaping through the opening of the package",

the examiner respectfully disagrees for the following reason:

The recitation "for a sufficient amount of time" (emphasis added) in claim 1 does not indicate any specific length of time it requires for the sterilizing vapor to be held in the package. Drevfors discloses that:

"...the vertically reciprocating pipe 9 is fed down into the opening of the packaging container and is connected to the source of sterili[s]ation agent, e.g. gas or spray-form hydrogen peroxide. After the aspiration of the requisite quantity of sterili[s]ation agent into the packaging container body, the pipe 9 is removed and the packaging container is displaced to station D" (column 4, lines 41-47) (emphasis added), and

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the examiner construes that during the time the pipe 9 is injecting the sterilization agent into the packaging container and the time the pipe 9 is withdrawn from the packaging container, the sterilizing vapor was held in the packaging container for a sufficient amount of time to sterilize the inside of the package as recited in claim 1.

11. In response to the Applicant's argument that:

*"Helmut fails to cure this deficiency of Drevfors. Rather, Helmut actually discloses releasing sterilizing vapour from the package ...", and
"... Thus, Helmut does not recite the step of "holding the sterilizing vapour on the inside of the package for a sufficient amount of time to sterilize the inside of the package by configuring the membrane to be disposed in the first position," as recited by claim 1 of the present invention",*

the examiner respectfully disagrees.

Helmut is relied upon for the teaching of the membrane fitted over the filling aperture the membrane being configured to be disposed in a first position in which the membrane is substantially impenetrable to vapour and a second position in which the membrane has been displaced to permit the insertion of an elongated member into the package (figures 5, 6 & 10 and column 2, lines 60-63).

Additionally, Helmut also discloses that:

"According to a preferred embodiment, the mechanical seal may be designed in a self-sealing fashion like a check valve which is opened during filling and then closes automatically" (column 2, lines 61-64),

thus, the examiner maintains that in combination, Drevfors and Helmut clearly disclose the claimed invention.

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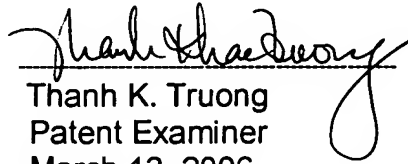
Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh K. Truong whose telephone number is 571-272-4472. The examiner can normally be reached on Mon-Thru 8:00AM - 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Thanh K. Truong
Patent Examiner
March 13, 2006.

Replacement Sheet

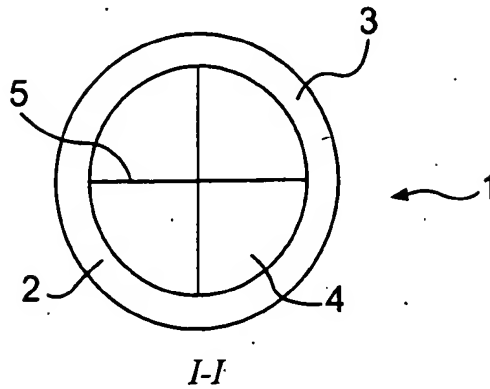


FIG. 1A

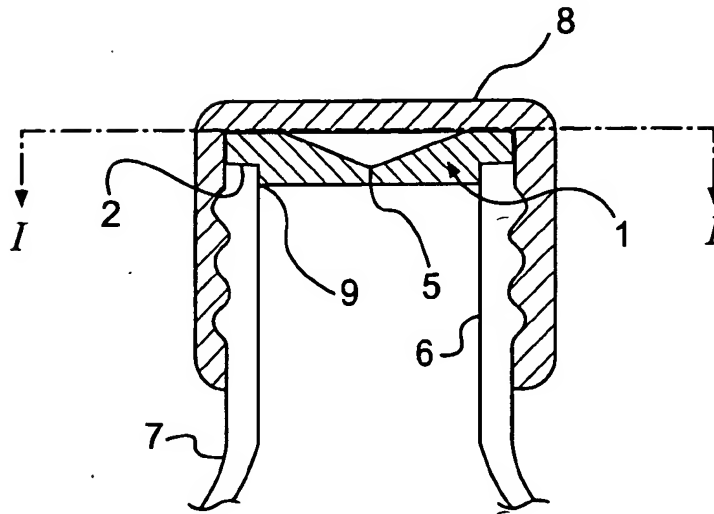


FIG. 1B

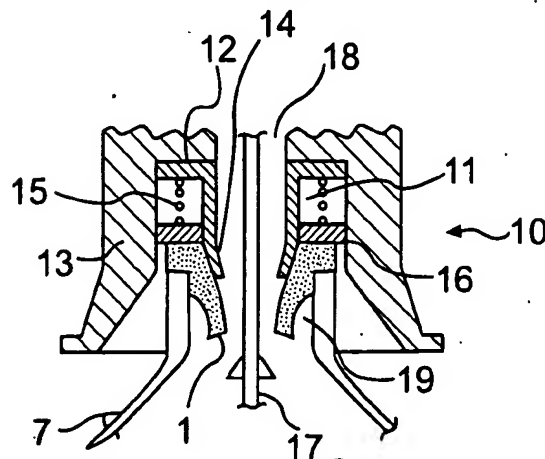


FIG. 2

DRAWINGS APPROVED Hct 3/10/06

Replacement Sheet

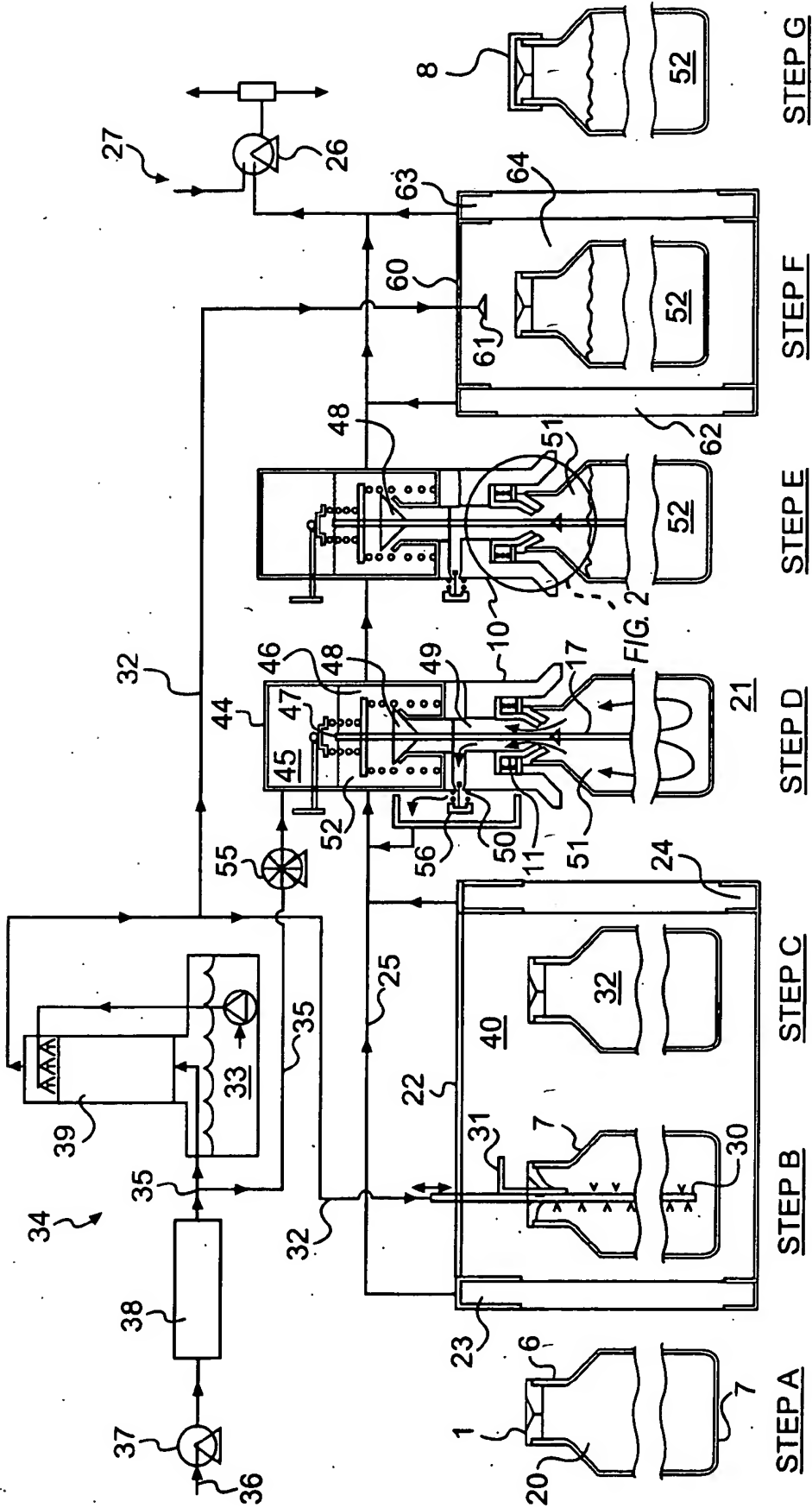


FIG. 3

Replacement Sheet

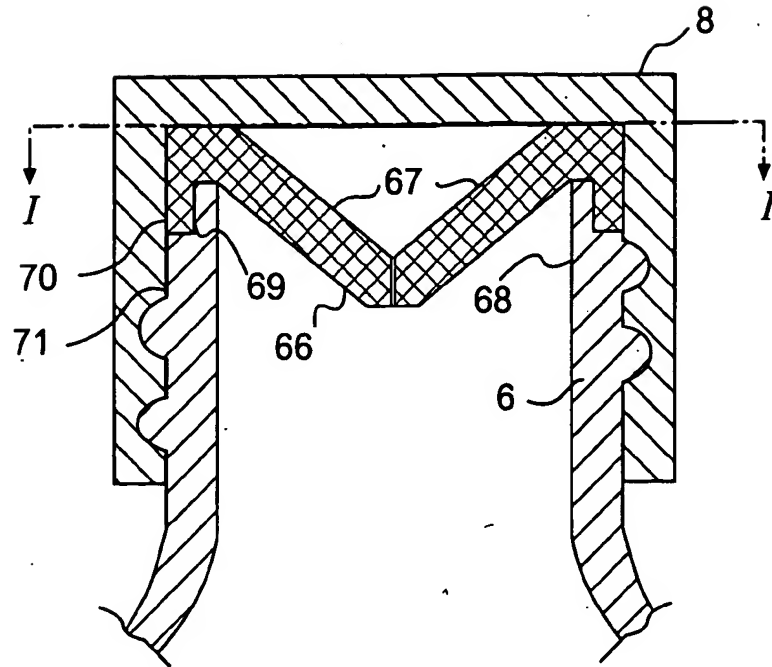


FIG. 4A

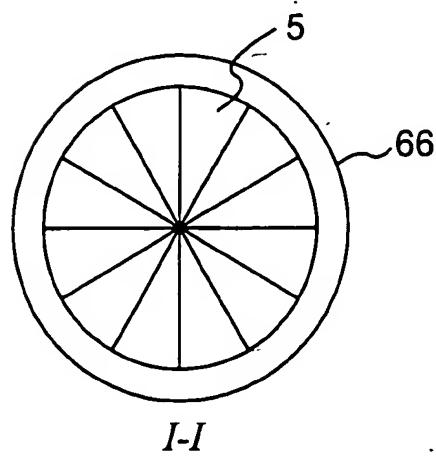


FIG. 4B

Replacement Sheet

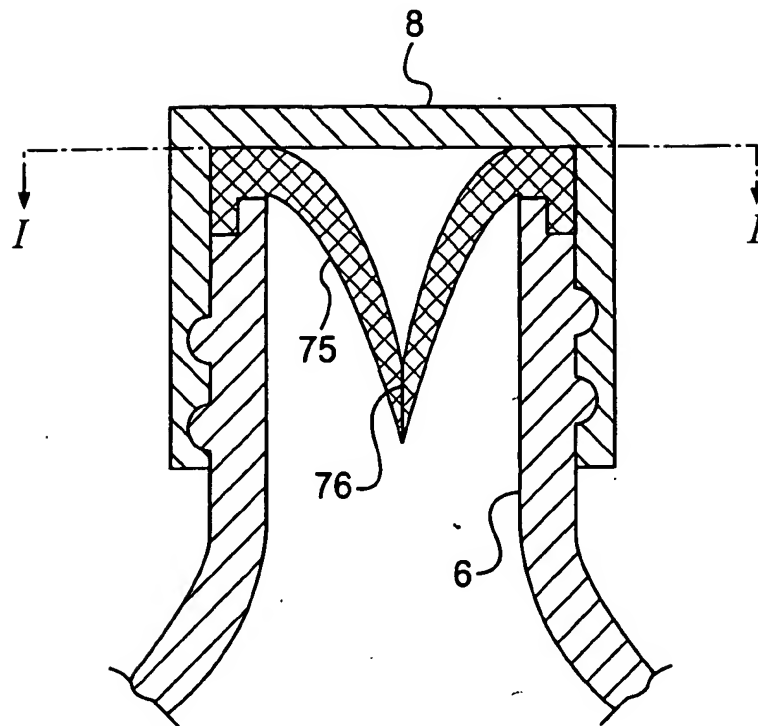


FIG. 5A

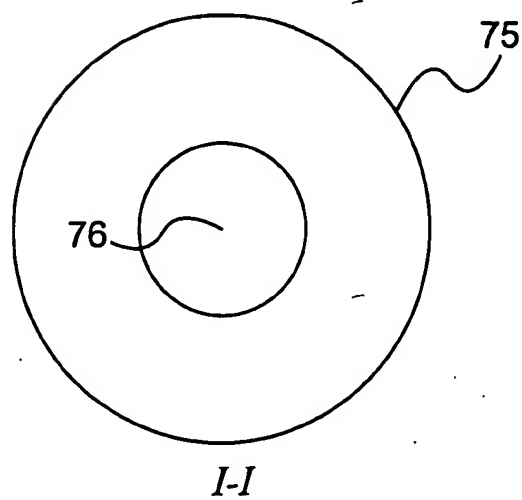


FIG. 5B

Replacement Sheet

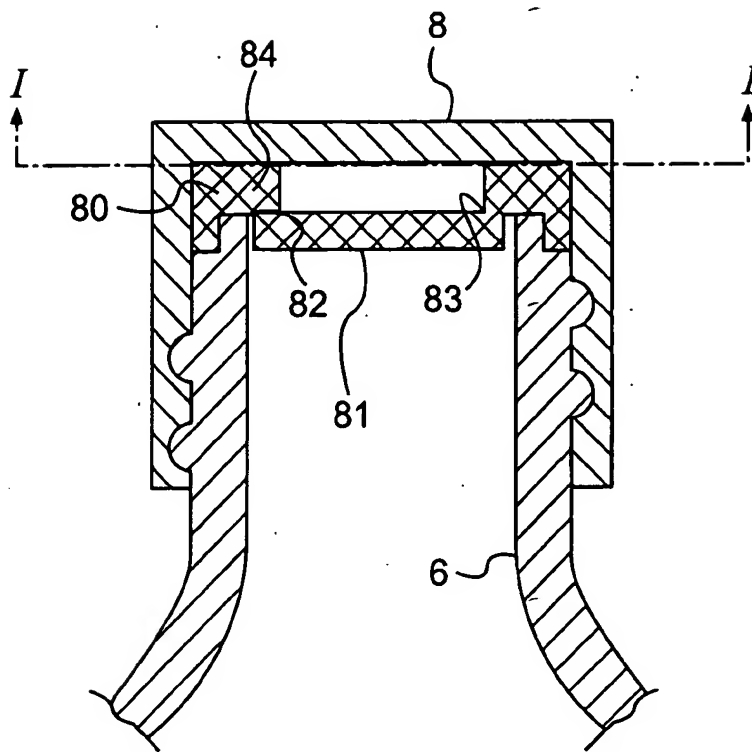


FIG. 6A

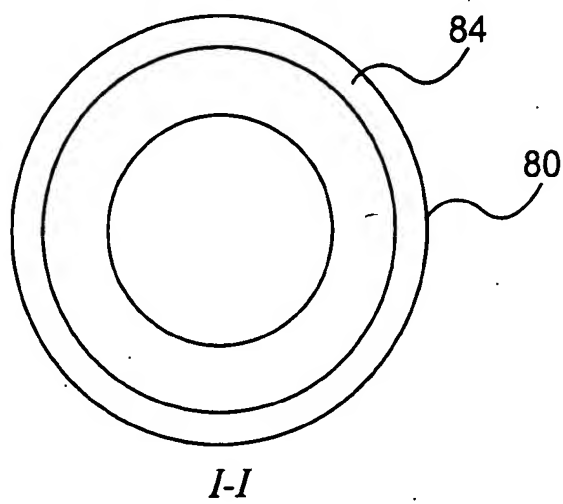


FIG. 6B

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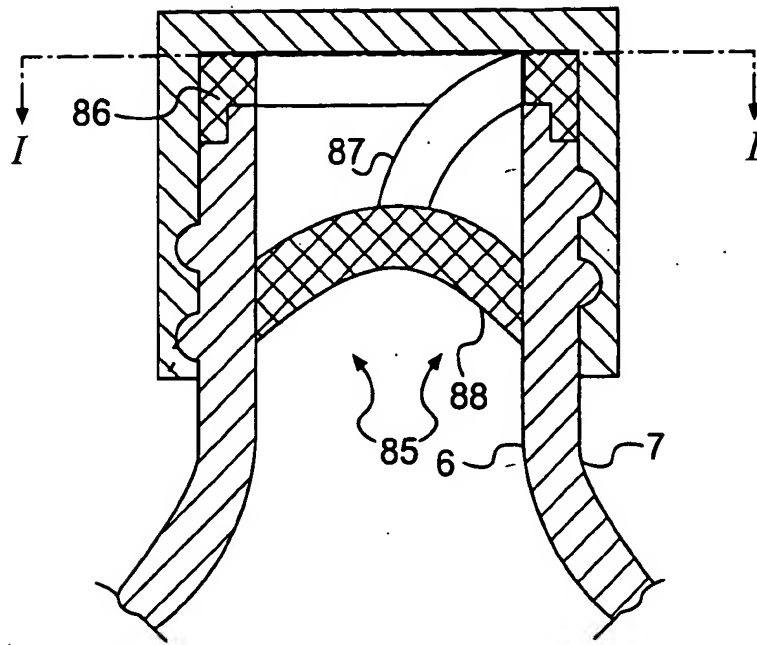


FIG. 7A

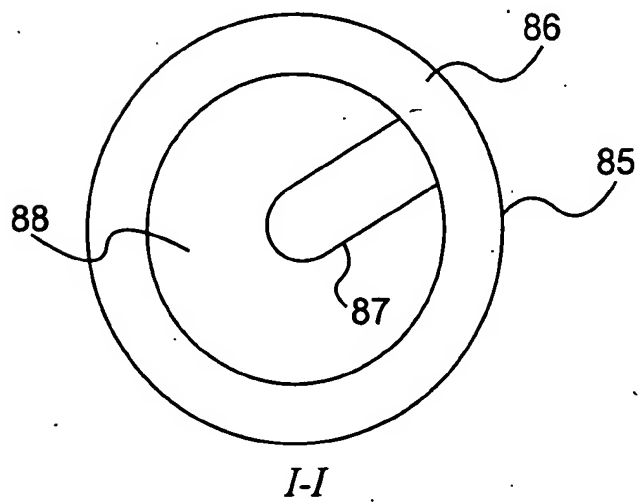


FIG. 7B